US006238476B1

(12) **United States Patent**
Sprinkle

(10) **Patent No.: US 6,238,476 B1**
(45) **Date of Patent: May 29, 2001**

(54) **METHOD OF CURING DRYWALL COMPOUND**

(76) Inventor: **Mark A. Sprinkle**, 2644 Shenandoah Ave., Charlotte, NC (US) 28205

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/334,139**

(22) Filed: **Jun. 15, 1999**

Related U.S. Application Data

(60) Provisional application No. 60/090,510, filed on Jun. 24, 1998, now abandoned.

(51) **Int. Cl.**[7] **C04B 11/00**; C04B 11/02

(52) **U.S. Cl.** **106/772**; 106/645; 106/646; 106/650; 106/651; 106/653; 106/654; 106/674; 106/675; 106/678; 106/680; 106/735; 106/736; 106/788; 106/792; 106/796; 106/799

(58) **Field of Search** 106/645, 646, 106/650, 651, 653, 654, 674, 675, 678, 680, 735, 736, 772, 788, 792, 796, 799

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,820,714	*	1/1958	Schneiter et al.	106/785
4,238,239	*	12/1980	Brown	106/111
4,746,365	*	5/1988	Babcock et al.	106/104
5,026,576	*	6/1991	Benvenuto et al.	427/355
5,079,042	*	1/1992	Frings	427/403
5,277,712	*	1/1994	McInnis	106/774
5,334,243	*	8/1994	Hyman	106/794
5,336,318	*	8/1994	Attard et al.	106/780
5,512,616	*	4/1996	Podlas	524/18
5,746,822	*	5/1998	Espinoza et al.	106/785
5,779,786	*	7/1998	Patel	106/781

* cited by examiner

Primary Examiner—Elizabeth D. Wood
(74) *Attorney, Agent, or Firm*—Christopher C. Dremann

(57) **ABSTRACT**

A method of reducing the curing time of drywall joint compound, and thereby reducing the time required to finish drywall joints or to repair plaster walls, includes adding a predetermined amount of a drying agent to a conventional ready-mixed drywall joint compound. The drying agent preferably comprises at least one compound selected from the group of compounds consisting of plaster of Paris, calcium carbonate, gypsum, crystallized silicon dioxide (quartz), Portland cement, perlite, lime, hydroxy ethyl ether of cellulose, polyvinyl alcohol, starch, wood fiber, potassium naphthalene sulfon, aluminum sulfate, sodium citrate, ammonium tartrate, hydrolyzed protein, monosodium phosphate, sodium naphthalene sulfonate, potassium sulfate and various trace materials, or mixtures thereof A sufficient amount of water is added to the drying agent to facilitate mixing the drying agent with the drywall joint compound to form a joint compound mixture. The joint compound mixture may then be applied to drywall or to a plaster wall in a manner that is well known in the art and will cure in a relatively short period of time so that subsequent coats of joint compound mixture may be added without significant delay. Furthermore, the method of the present invention allows the joint compound mixture to be smoothed after application to the drywall or to the plaster wall without sanding.

17 Claims, 1 Drawing Sheet